United States
Department of
Agriculture

Natural Resources
Conservation
Service

Oregon
Basin Outlook Report

May 1, 2012

Photo courtesy of Tom Snyder and Scott Robbins (NRCS Oregon)

The above photo was taken on May 1, 2012 of Bear Grass SNOTEL. The site was installed in September 2011 in the headwaters of the McKenzie River, which drains into the Willamette River. Out of 23 SNOTEL sites in the Willamette basin, Bear Grass (4720 ft elev) had the highest May 1 snow water content at 51 inches (8.5 feet of snow depth). Snowpack at the site peaked in late March (63 inches of snow water, 13.5 ft of snow depth). Though the site has been actively melting since the end of March, there were 5 days with significant snowfall during April; including a 9 inch snow accumulation on April 26. The site is new and has no long-term averages; however, the Willamette basin had 104% of average snowpack, as of May 1.

Contents

General Outlook

May 1, 2012

SUMMARY

Another wet month prevailed throughout most of Oregon. Except for the Owyhee basin in the southeast corner of the state, all basins received above average precipitation for April. Record high temperatures and sunshine warmed the state in the latter half of the month, accelerating mountain snowmelt and increasing streamflows. Oregon rounded out the end of the month with a dose of wet and cool weather, including some new snowfall in the mountains.

As of May 1, the Cascade Mountain Range and the far northern tier of Idaho and Montana were the only regions with average to above average snowpack in the western U.S. Elsewhere across the West, snowpacks were below average and as low as 25 percent of average in the southwestern part of the country.

While the water supply outlook looks dismal for parts of the West, most of Oregon should have adequate water supplies for the coming summer. In the drier regions of the state that experienced low snowpack levels this winter, such as the John Day basin and southeastern Oregon, the streamflow forecasts are below average as of May 1. Storage volumes for many of this region's reservoirs are above average for this time of year and may provide a buffer for irrigators. Rivers draining from the Cascade Mountains are expected to experience average to above average volumes for the coming summer, which could provide exciting recreation opportunities.

SNOWPACK

A range of snowpack conditions exist throughout Oregon, as of May 1. While snow melted rapidly in the southern and eastern basins, the upper elevations in the Cascades accumulated new snow during the cool period at the end of the month. Snow measuring stations in the Deschutes, Crooked, Hood and Willamette basins are measuring above average snowpack levels. This indicates that the late start to the snow season is being cushioned by an incredible March comeback and lingering snowpacks.

As of May 1, the John Day, Owyhee and Malheur basins are mostly snow free, even at the highest elevations. Last year at this time, sites in these basins had as much as 5 feet of snow. Lower elevations in the Klamath, Lake County and Goose Lake basins have melted out, but the higher elevations are hanging on to snow; albeit below average. However, a handful of sites in the Klamath have above normal snowpacks on May 1.

The bottom line is that there is a lot of snowpack variability across the state, as of May 1. Most Oregon SNOTEL sites are currently in the snowmelt phase, although winter hasn't broken yet at a few of the highest elevation sites in the Cascade Mountains. All around, last year had a much bigger snowpack consistently across the state at this point in the season.

PRECIPITATION

For the second month in a row, Oregon's mountains received above average precipitation, with the exception of the Owyhee and Malheur basins. The type of precipitation was mainly rainfall, which combined with warm temperatures and sunshine to accelerate snowmelt. However, early April and another cooling trend that occurred during the last few days of the month allowed snow to accumulate in the Cascades.

The western and northern basins of the state have had above average precipitation for the water year, which began on October 1, while the southern and eastern basins of Oregon have had slightly below average water year precipitation.

RESERVOIRS

Healthy reservoir storage may well be the knight in shining armor that helps rescue water supply conditions in the drier regions of Oregon this summer. Most reservoirs in the state have average to above average volumes for this time of year. Last year's bumper snow year and late spring provided an opportunity for reservoir operators to store a reserve of water. In areas where summer streamflows are expected to be below average and the snow has already melted, such as the Owyhee and Malheur basins, the stored water may provide the buffer that is needed for the local water users.

The May 1 storage at 26 major Oregon reservoirs analyzed in this publication was 98 percent of average. As of May 1, water storage at these reservoirs totaled 2,570 thousand acre feet (kaf), representing 80 percent of usable capacity. Last year at this time, these same reservoirs stored 2,677 kaf of water.

STREAMFLOW

A mix of above average precipitation, sunshine and record breaking mid-month temperatures caused many Oregon rivers to experience peak streamflows during April. Rivers that flow from the Cascades may see another snowmelt-driven peak.

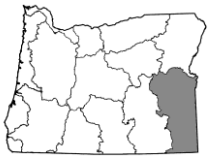
Summer streamflow forecasts mirror the snowpack conditions. Basins where the snow is near average or better on May 1 have streamflow forecasts that are also near average or above average for the coming summer. Most streams and rivers in southeastern Oregon are forecast to have below normal streamflows for the summer of 2012. The Owyhee and Malheur basins have the lowest streamflow forecasts, with respect to average. The Owyhee near Rome is forecast to be a mere 17% of average for the May through September period, the lowest in the state. Note that the forecast periods have changed from the April 1 report. Streamflow forecasts periods in the May 1 report are for May through July and May through September.

A summary of streamflow forecasts for Oregon follows:

STREAM	PERIOD	PERCENT OF AVERAGE
Owyhee Reservoir Inflow	May-Sep	27
Grande Ronde R at La Grande	May-Sep	92
Umatilla R at Pendleton	May-Sep	89
Deschutes R at Benham Falls	May-Sep	103
MF Willamette R bl NF	May-Sep	113
Rogue R at Raygold	May-Sep	93
Upper Klamath Lake Inflow	May-Sep	94
Silvies R nr Burns	May-Sept	89

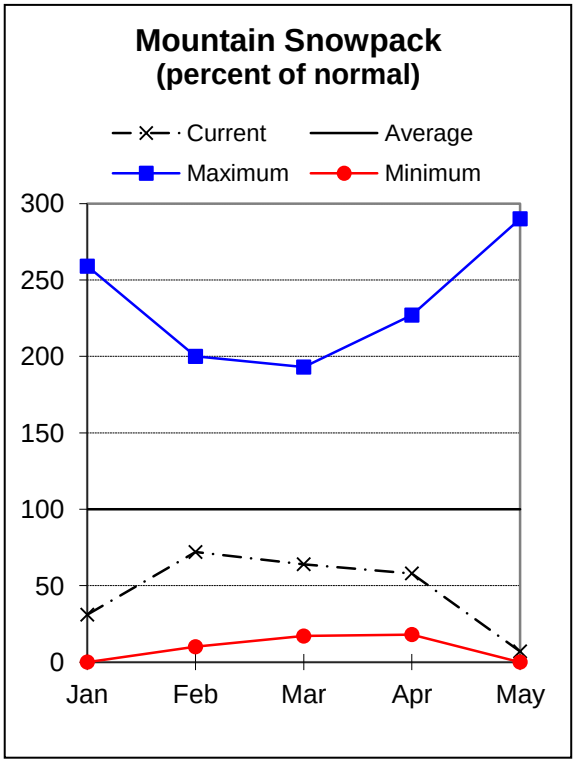
Some of these forecasts assume that normal weather conditions will occur from now to the end of the forecast period. The forecasts in this bulletin are a result of coordinated activity between the Natural Resources Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

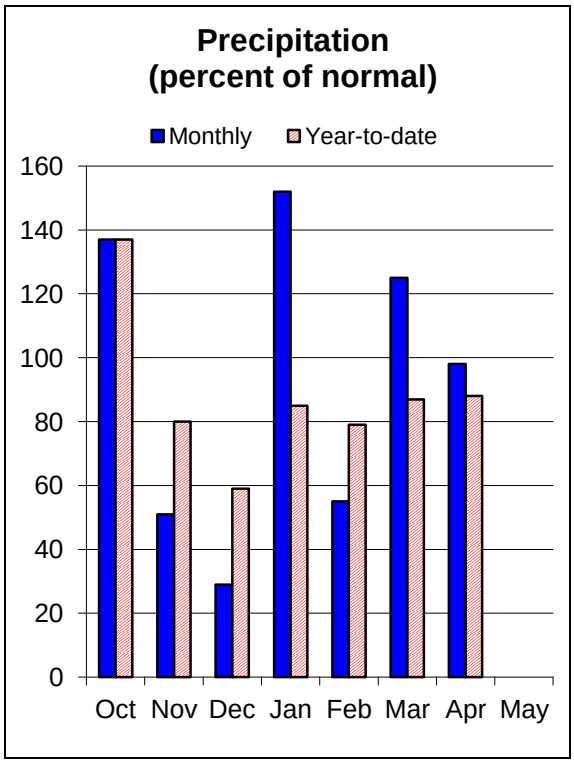
This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators. This report will be updated monthly, January through June.



Owyhee and Malheur Basins

May 1, 2012





Water Supply Outlook

The snowpack in southeastern Oregon peaked well below average and melted early this year. As of May 1, Blue Mountain Springs SNOTEL site was the only site in the Owyhee and Malheur basins still recording snow. Many sites melted out about a month early, especially in the upper reaches of the Owyhee basin.

Record high heat was recorded across the region in late April, with many sites experiencing temperatures above 70 degrees F. This heat wave was followed by a significant precipitation event on April 26-28. Many SNOTEL sites recorded over an inch of precipitation during the late-April storm event, which boosted April precipitation to 98 percent of average for the basin. This was the only region of the state that had below average precipitation for April. Since October 1, the water year precipitation has been 89 percent of average.

Reservoir storage in the Owyhee and Malheur basins remains slightly above average, which may provide a buffer for the low streamflows this summer. May 1 storage at the four irrigation reservoirs in the basin was 102 percent of average and 86 percent of capacity.

Summer streamflow forecasts in the Owyhee and Malheur basins remain well below normal. In general, water supply conditions are better in the north, and decrease to the south. The May through September streamflow forecasts in the basin range from 17 percent of average for the Owyhee River near Rome to 72 percent of average for the NF Malheur River at Beulah. Water users in the basin can expect well below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Ontario - (541) 889-7637
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

OWYHEE AND MALHEUR BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Malheur R nr Drewsey	MAY-JUL	7.4	11.8	15.5	44	19.6	27	35
	MAY-SEP	8.5	13.2	17.0	46	21	28	37
NF Malheur R at Beulah (2)	MAY-JUL	16.3	21	25	68	29	36	37
	MAY-SEP	21	27	31	72	36	43	43
Owyhee R bl Owyhee Dam (2)	MAY-JUL	13.0	30	46	20	65	99	225
	MAY-SEP	26	49	69	27	92	132	255
Owyhee R nr Rome	MAY-JUL	2.0	7.0	28	13	69	130	210
	MAY-SEP	3.0	7.0	39	17	81	142	230

OWYHEE AND MALHEUR BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BEULAH RES	60.0	56.4	53.3	51.2
BULLY CREEK	30.0	21.4	23.6	25.6
OWYHEE	715.0	631.0	666.1	613.6
WARMSPRINGS	191.0	150.8	159.1	149.9

OWYHEE AND MALHEUR BASINS
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Owyhee	7	0	0
Upper Malheur	3	20	42
Jordan Creek	2	0	0
Bully Creek	0	0	0
Willow Creek	0	0	0

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

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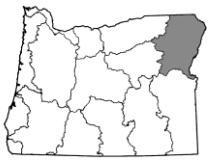
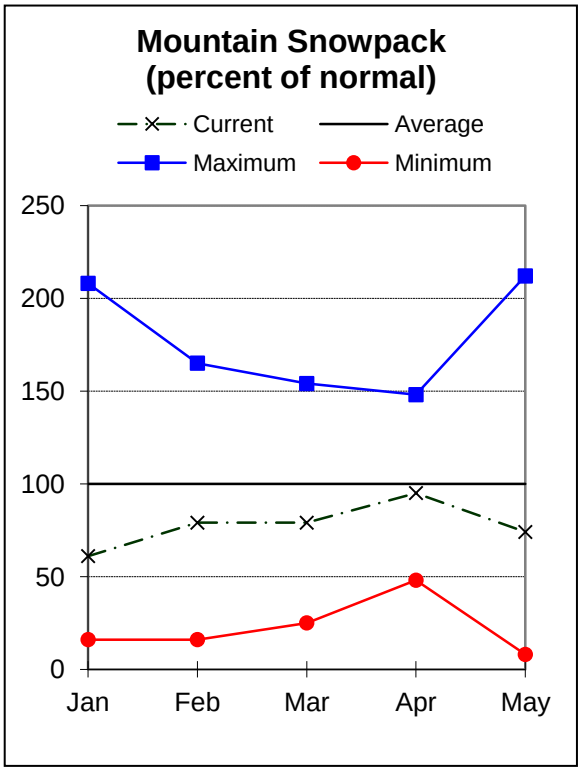
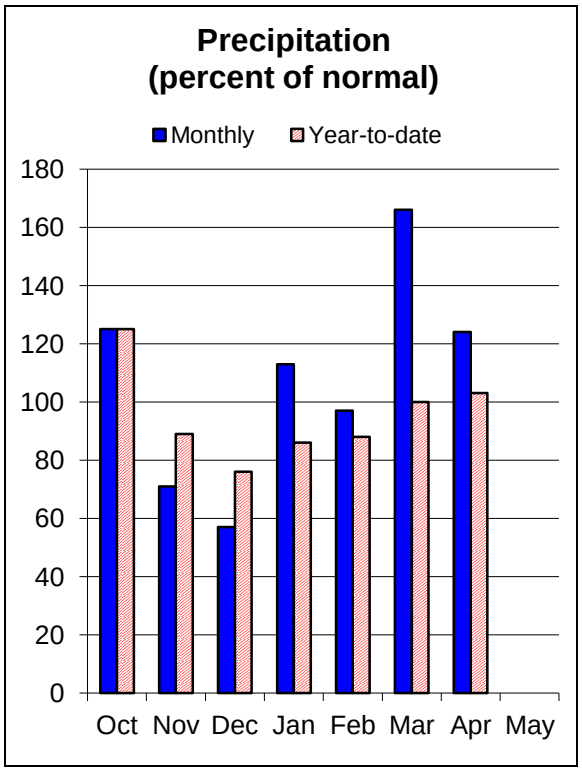


Burnt, Powder, Grande Ronde, and Imnaha Basins

April 1, 2012





Water Supply Outlook

Snowmelt was in full swing during the latter half of April in the mountains of northeastern Oregon. Air temperatures rose to record highs and stayed above freezing for several days at even the highest elevation SNOTEL sites in the basin, causing significant snowmelt. April ended with a cold snap and a spring snow storm in the mountains, which slowed the melt at sites that still had snow. As of May 1, the snowpack in the Burnt, Powder, Pine, Grande Ronde and Imnaha basins was 74 percent of average and 10 of 15 SNOTEL sites still had snow.

April was wetter than normal in northeastern Oregon. The Burnt , Power, Pine, Grande Ronde and Imhnaha basins received 124 percent of normal precipitation this month. Since the beginning of water year 2012, precipitation in the basins has been 103 percent of average.

May 1 storage at Phillips Lake, Thief Valley and Unity reservoirs was 98 percent of average and at 86 percent of capacity.

The May through September streamflow forecasts range from 58 percent of average for the Burnt River near Hereford to 98 percent of average for the Imnaha River at Imnaha. Elsewhere in the basin, the Grande Ronde River at Troy is forecast to be 97 percent of average for the May through September period. Water users in the basin can expect well below normal to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Enterprise- (541) 426-4588; Baker City - (541) 523-7121; LaGrande - (541) 963-4178
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Bear Ck nr Wallowa	MAY-SEP	45	50	54	96	58	63	56
Burnt R nr Hereford (2)	MAY-JUL	3.9	7.5	10.0	58	12.5	16.1	17.3
	MAY-SEP	4.7	8.5	11.0	58	13.5	17.3	19.1
Catherine Ck nr Union	MAY-JUL	34	40	44	90	48	54	49
	MAY-SEP	37	43	47	89	51	57	53
Deer Ck nr Sumpter	MAY-JUL	3.2	5.0	6.3	60	7.6	9.4	10.5
Grande Ronde R at La Grande	MAY-JUL	58	81	97	92	113	136	106
	MAY-SEP	61	86	103	92	120	145	112
Grande Ronde R at Troy (1)	MAY-JUL	580	795	890	98	985	1200	910
	MAY-SEP	665	880	980	97	1080	1290	1010
Imnaha R at Imnaha	MAY-JUL	159	189	210	98	230	260	215
	MAY-SEP	182	215	235	98	255	290	240
Lostine R nr Lostine	MAY-JUL	88	95	99	96	103	110	103
	MAY-SEP	95	102	107	96	112	119	112
Pine Ck nr Oxbow	MAY-JUL	68	85	96	89	107	124	108
	MAY-SEP	73	90	101	89	112	129	114
Powder R nr Sumpter	MAY-JUL	19.4	26	31	76	36	43	41
	MAY-SEP	19.8	27	32	76	37	44	42
Wolf Ck Reservoir Inflow (2)	MAY-JUN	2.8	5.4	7.2	70	9.0	11.6	10.3

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BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
PHILLIPS LAKE	73.5	61.4	59.7	59.9
THIEF VALLEY	17.4	14.0	14.0	17.5
UNITY	25.2	24.7	22.3	24.3
WALLOWA LAKE	37.5	23.8	19.0	22.6
WOLF CREEK	10.4	11.1	10.3	9.4

BURNT, POWDER, PINE, GRANDE RONDE AND IMNAHA BASINS
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Upper Grande Ronde	7	30	64
Wallowa	4	60	88
Imnaha	3	74	94
Powder	7	18	44
Burnt	2	0	0

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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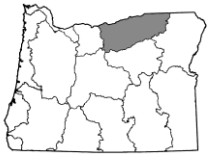
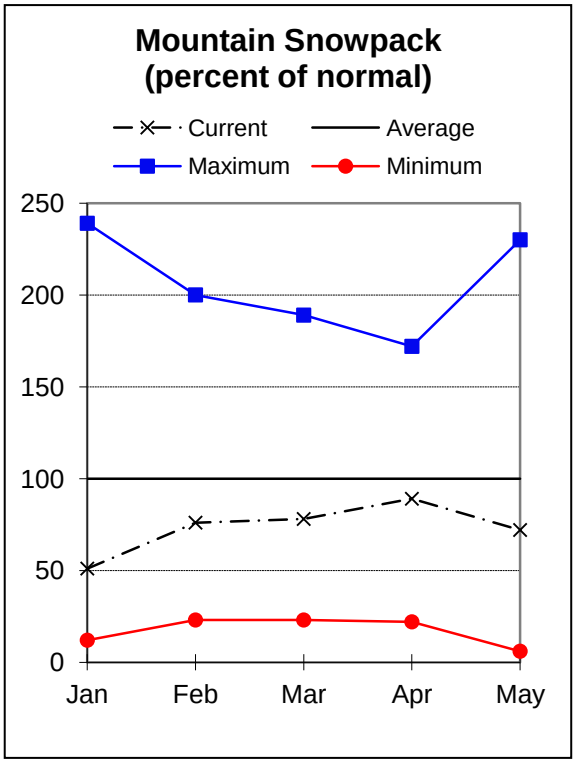
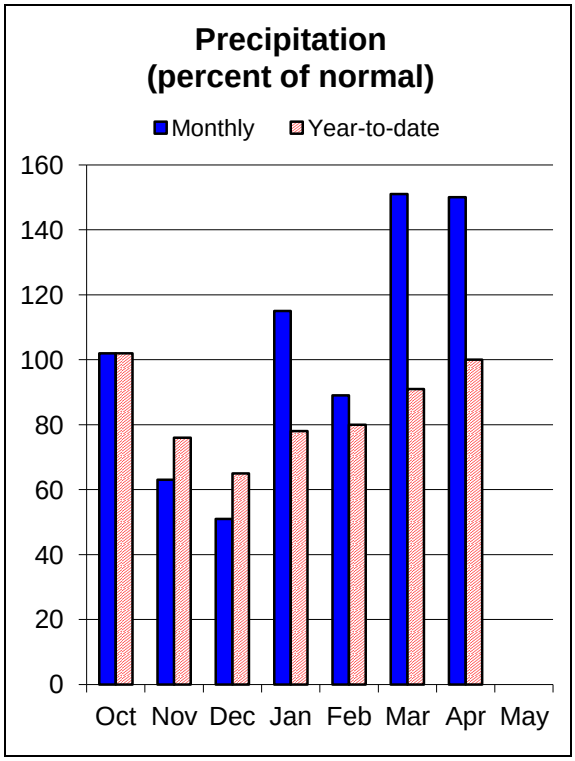


Umatilla, Walla Walla, Willow Rock, and Lower John Day Basins

May 1, 2012





Water Supply Outlook

April was another wet month in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins. Several measurement sites recorded more than twice as much April precipitation than average. April precipitation in the basin was 150 percent of average, the highest in the state. Since the beginning of water year, precipitation has been 100 percent of average for the basin.

The late-April heat wave brought record high temperatures and raised air temperatures above freezing for almost an entire week at the higher elevations. This accelerated snowmelt in the mountains. As of May 1, 4 of the 8 SNOTEL sites in the Umatilla, Walla Walla, Willow, Rock and Lower John Day basins were snow-free. The May 1 basin snowpack was 72 percent of average.

Snowmelt-driven streamflows boosted reservoir storage this month. The May 1 storage at Cold Springs and MacKay reservoirs was 80 percent of average and 71 percent of capacity. This is a significant increase from April 1 reservoir storage levels.

Streamflow forecasts in the basin increased slightly from last month's report. The May through September streamflow forecasts range from 89 percent of average for the Umatilla River at Pendleton to 94 percent of average for the South Fork Walla Walla River near Milton-Freewater. Water users in the basin can expect near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Pendleton - (541) 278-8049; Heppner - (541) 676-5021; Condon - (541) 384-2671
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Butter Ck nr Pine City	MAY-JUL	1.0	3.0	4.3	92	5.6	7.6	4.7
	MAY-SEP	1.4	3.4	4.7	90	6.0	8.0	5.2
McKay Ck nr Pilot Rock	MAY-SEP	0.6	6.4	11.2	90	16.0	23	12.4
Rhea Ck nr Heppner	MAY-JUL	0.5	2.3	3.5	103	4.7	6.5	3.4
Umatilla R ab Meacham Ck nr Gibbon	MAY-JUL	21	31	38	91	45	55	42
	MAY-SEP	26	36	43	90	50	60	48
Umatilla R at Pendleton	MAY-JUL	27	52	70	90	88	113	78
	MAY-SEP	31	57	75	89	93	119	84
SF Walla Walla R nr Milton-Freewater	MAY-JUL	26	32	35	92	38	44	38
	MAY-SEP	38	44	48	94	52	58	51
Willow Ck ab Willow Ck Lake nr Heppn	MAY-JUL	0.3	2.0	3.2	73	4.4	6.0	4.4

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS

Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COLD SPRINGS	44.6	25.1	35.0	42.7
MCKAY	73.8	58.6	64.6	61.6
WILLOW CREEK	1.8	6.1	1.7	---

UMATILLA, WALLA WALLA, WILLOW, ROCK AND LOWER JOHN DAY BASINS

Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Walla Walla	2	55	94
Umatilla	5	28	51
McKay Creek	3	0	0

*

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.
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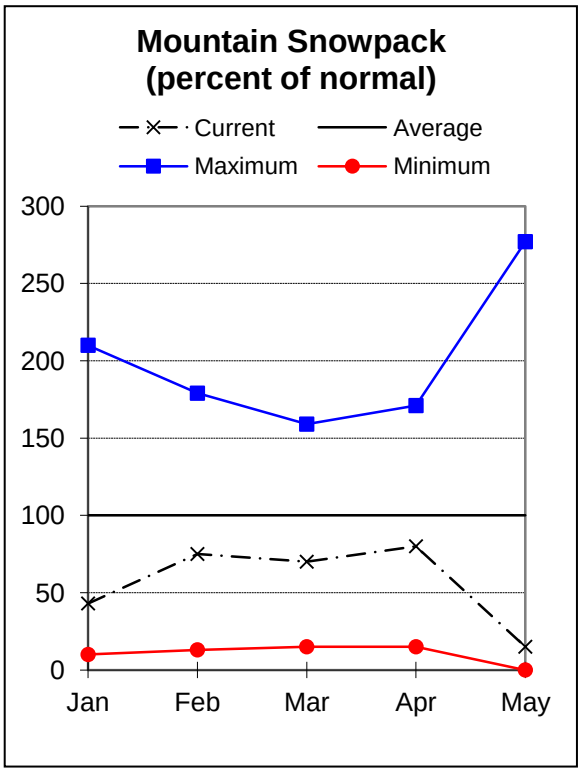
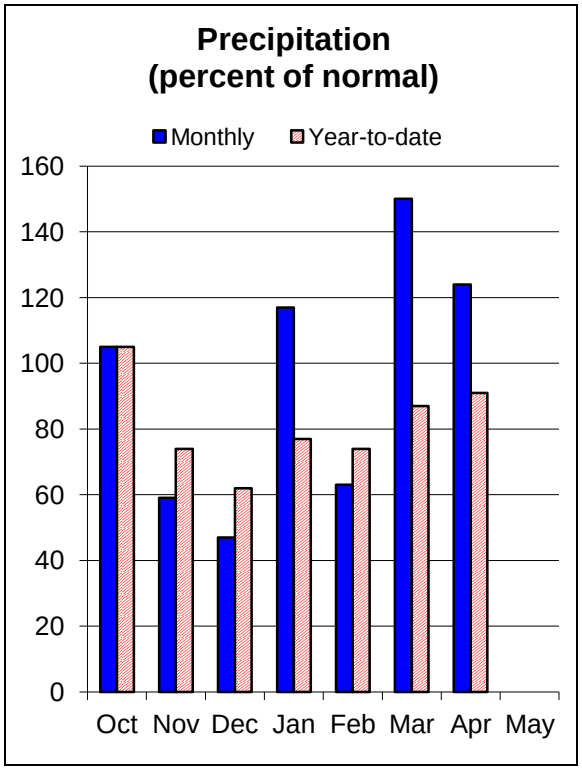
Upper John Day Basin

May 1, 2012





Water Supply Outlook

The Upper John Day basin experienced a very warm week of above freezing weather during late April, even at the higher elevations. All SNOTEL sites in the basin set record highs for air temperature, including Gold Center and Tipton SNOTEL sites which both reached 78 degrees Fahrenheit. This exceeded the previous record high temperature for April 23 by an astonishing 19 degrees at both sites, which have over 20 years of record.

Snowmelt in the basin was rapid during the month of April, due to the warm temperatures and above normal precipitation. By May 1, only two of the 13 SNOTEL sites in the basin still had snow.

April precipitation was 124 percent of average in the Upper John Day basin. Since the beginning of water year 2012, precipitation in the basin has been 91 percent of average.

The May through September streamflow forecasts range from 74 percent of average for Mountain Creek near Mitchell to 93 percent of average for Strawberry Creek near Prairie City. Water users in the basin can expect below normal to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
John Day - (541) 575-0135
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UPPER JOHN DAY BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Camas Ck nr Ukiah	MAY-JUL	4.9	10.5	14.3	78	18.1	24	18.4
	MAY-SEP	5.4	11.0	14.9	78	18.8	24	19.2
MF John Day R at Ritter	MAY-JUL	29	48	60	77	72	91	78
	MAY-SEP	33	52	65	78	78	97	83
NF John Day R at Monument	MAY-JUL	152	235	295	79	355	440	375
	MAY-SEP	164	250	310	80	370	455	390
Mountain Ck nr Mitchell	MAY-JUL	0.6	1.4	2.0	73	2.5	3.3	2.7
	MAY-SEP	0.6	1.5	2.0	74	2.6	3.4	2.7
Strawberry Ck nr Prairie City	MAY-JUL	4.1	5.3	6.1	92	6.9	8.1	6.6
	MAY-SEP	4.7	6.0	6.8	93	7.6	8.9	7.3

UPPER JOHN DAY BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

UPPER JOHN DAY BASIN
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork John Day	7	7	15
John Day above Kimberly	5	8	17

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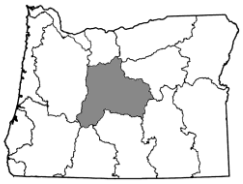
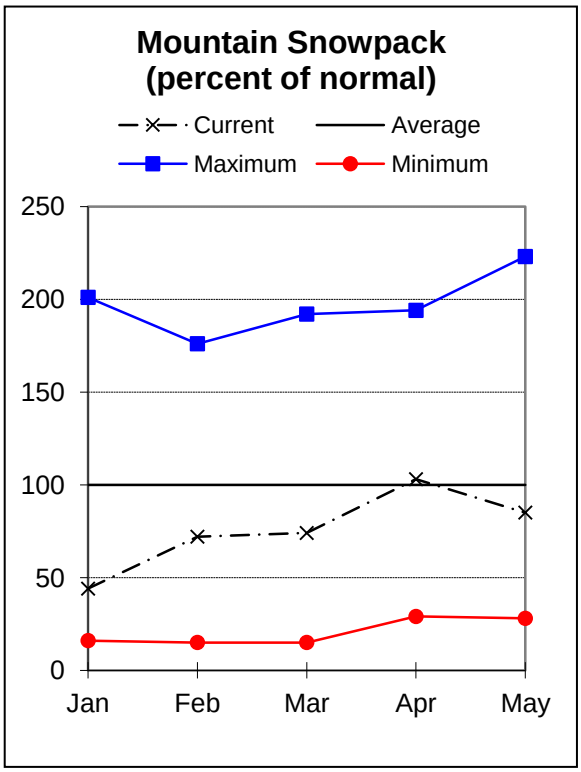
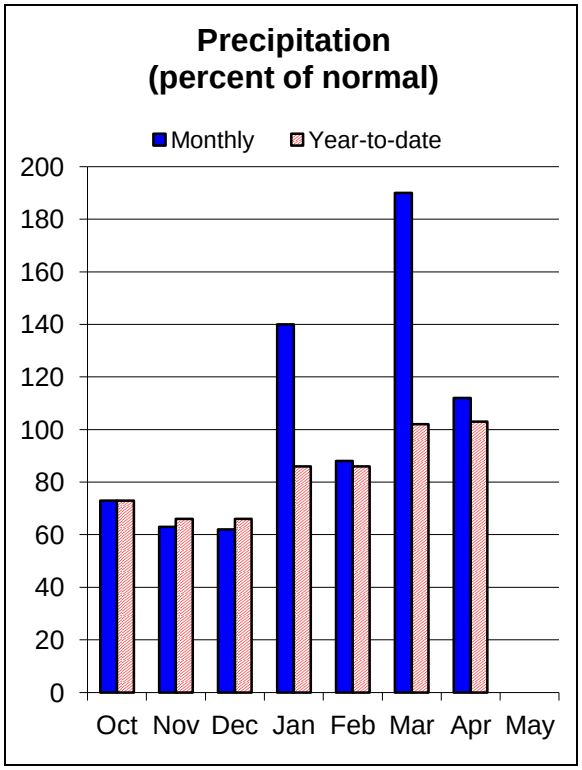
John Day - (541) 575-0135
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/



Upper Deschutes and Crooked Basins

May 1, 2012





Water Supply Outlook

Most snowpack measurement sites in the Upper Deschutes and Crooked River basin peaked during April and many are snow free as of May 1. However, a late April storm brought significant precipitation to the basin, including several inches of new snow at sites above 5000 feet. As of May 1, snowpack in the basin was 85 percent of normal. Six of the 14 SNOTEL sites in the basin were snow-free at the end of April, including all the sites in the Crooked River Basin.

April precipitation was 112 percent of average in the basin. Since the beginning of water year 2012, precipitation in the basin has been 103 percent of average.

The May 1 storage at five irrigation reservoirs in the basin was 113 percent of average and at 98 percent of capacity. Above average reservoir storage in the Crooked River basin may provide a buffer for the very low streamflows that are anticipated for the coming summer.

Streamflow forecasts in the Upper Deschutes and Crooked River basins vary greatly from east to west. The May through September streamflow forecasts range from 36 percent of average for the Prineville Reservoir Inflow to 116 percent of average for the Little Deschutes River near La Pine. Users that depend on water supplies from the east side of the basin should expect well below normal streamflows, while users in the western part of the basin can expect near normal to above normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Redmond (541) 923-4358
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

UPPER DESCHUTES AND CROOKED BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Crane Prairie Reservoir Inflow (2)	MAY-JUL	41	48	52	106	56	63	49
	MAY-SEP	71	80	86	104	92	101	83
Crescent Ck nr Crescent (2)	MAY-JUL	10.9	14.1	16.2	115	18.3	22	14.1
	MAY-SEP	14.7	17.9	20	112	22	25	17.8
Deschutes R at Benham Falls nr Bend	MAY-JUL	255	270	280	104	290	305	270
	MAY-SEP	425	445	460	103	475	495	445
Deschutes R bl Snow Ck nr La Pine	MAY-JUL	21	26	29	107	32	37	27
	MAY-SEP	46	53	57	108	61	68	53
Little Deschutes R nr La Pine (2)	MAY-JUL	49	56	61	117	66	73	52
	MAY-SEP	57	65	71	116	77	85	61
Ochoco Reservoir Inflow (2)	MAY-JUL	0.5	2.1	5.4	52	8.7	13.6	10.3
	MAY-SEP	0.5	1.7	5.2	51	8.7	13.8	10.3
Prineville Reservoir Inflow (2)	MAY-JUL	2.0	7.2	17.4	40	28	43	44
	MAY-SEP	2.2	6.0	16.4	36	27	42	45
Whychus Ck nr Sisters	MAY-JUL	29	32	33	103	34	37	32
	MAY-SEP	41	43	45	102	47	49	44

UPPER DESCHUTES AND CROOKED BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CRANE PRAIRIE	55.3	55.4	50.9	44.9
CRESCENT LAKE	86.9	84.6	75.1	55.5
OCHOCO	47.5	42.7	38.4	36.0
PRINEVILLE	153.0	148.7	144.0	145.0
WICKIUP	200.0	200.1	197.8	188.5

UPPER DESCHUTES AND CROOKED BASINS
Watershed Snowpack Analysis - May 1, 2012

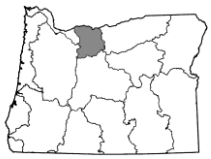
Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Crooked	4	0	0
Little Deschutes	4	55	90
Deschutes above Wickiup R	4	50	89
Tumalo and Squaw Creeks	2	67	105

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

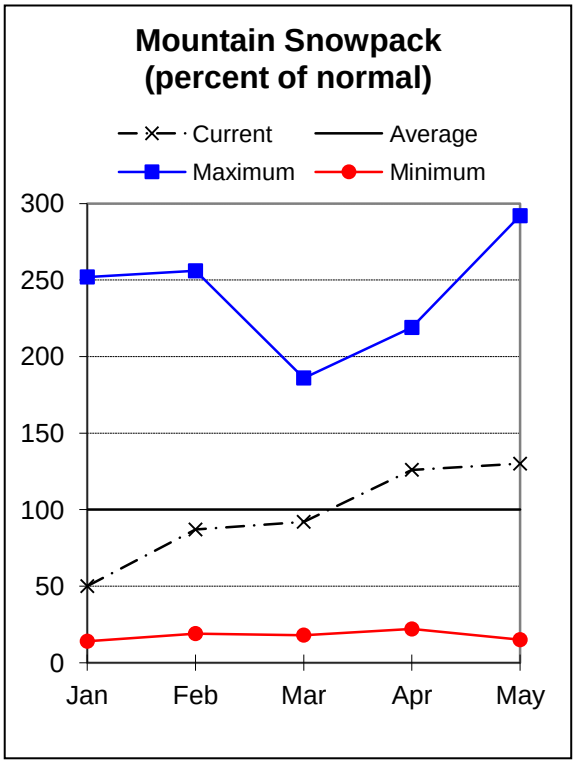
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

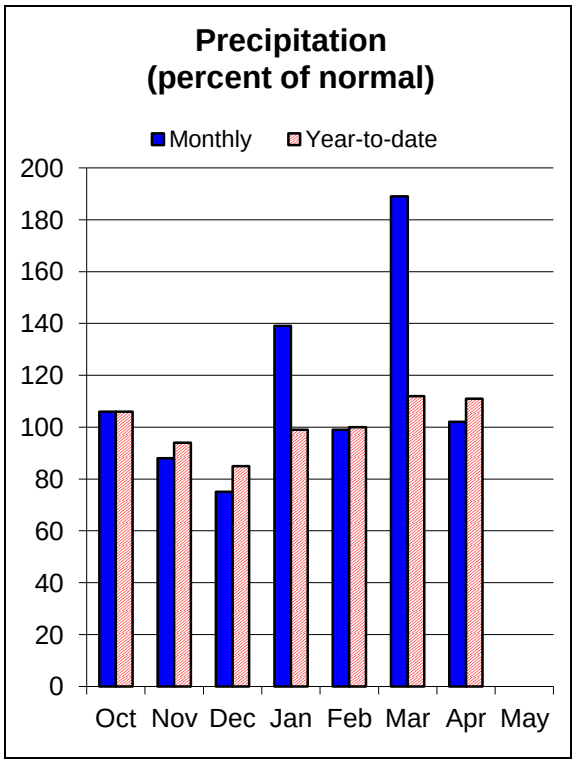
For more information contact your local Natural Resources Conservation Service office:
Redmond (541) 923-4358
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/



Hood, Mile Creeks, and Lower Deschutes Basins

May 1, 2012





Water Supply Outlook

Winter still has a grip on the mountains of northwest Oregon. Spring seemed to have landed in late April when a heat wave brought record high temperatures above 70 degrees Fahrenheit to every SNOTEL site in the Hood, Mile Creeks and Lower Deschutes basins. However, wintry weather quickly moved back in. As April ended, snowmelt had slowed to a crawl at the higher elevations and several SNOTEL sites even recorded several inches of new snow. As of May 1, the basin snowpack was 130 percent of average and all 8 SNOTEL sites in the basin were still recording snow. This is the highest snowpack in the state.

Precipitation for the month of April was 102 percent of average. Since the beginning of water year 2012, precipitation in the basin has been 111 percent of average, the highest in the state.

The May through September streamflow for Hood River at Tucker Bridge is forecast to be 112 percent of average. Water users in the Hood, Mile Creeks and Lower Deschutes basin can expect slightly above normal streamflows during the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
The Dalles (541) 296-6178
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WF Hood River nr Dee	MAY-JUL	65	80	91	115	102	117	79
Hood R At Tucker Bridge	MAY-JUL	144	160	170	111	180	196	153
	MAY-SEP	188	205	220	112	235	250	196

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (WASCO)	11.9	8.5	6.5	5.2

HOOD, MILE CREEKS AND LOWER DESCHUTES BASINS
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Hood River	5	80	120
Mile Creeks	0	0	0
White River	4	84	110

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

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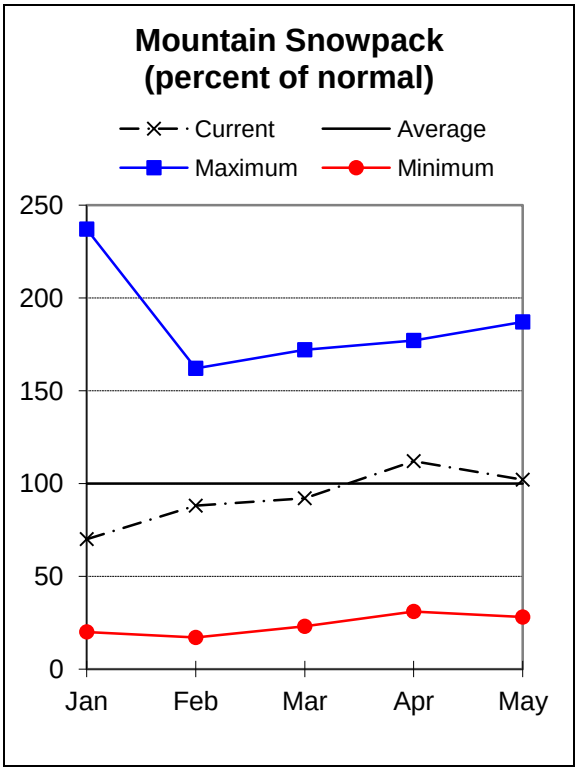
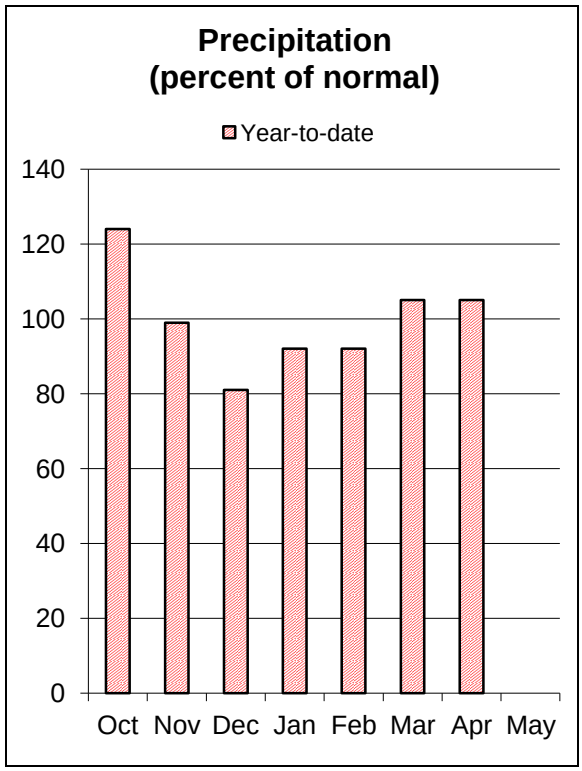
Lower Columbia Basin

May 1, 2012





Water Supply Outlook

On May 1, the snowpack in the Columbia River basin was 102 percent of average, as measured by 237 SNOTEL sites in the US portion of the basin. Precipitation in the US portion of the basin since October 1 has been 105 percent of average. Locally, precipitation since October 1 in the Sandy basin has been 111 percent of average.

Streamflow forecasts for the Oregon portion of the Lower Columbia River Basin have increased slightly from last month's report. The Columbia River at The Dalles is forecast to be 116 percent of average for the May through September period, and the Sandy River near Marmot is forecast to be 114 percent of average for the same period.

For more information contact your local Natural Resources Conservation Service office:
Oregon City - (503) 656-3499
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

LOWER COLUMBIA BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Columbia R at The Dalles (2)	MAY-JUL	73400	77600	80400	114	83200	87400	70500
	MAY-SEP	89600	94600	98000	116	101000	106000	84500
Sandy R nr Marmot	MAY-JUL	192	220	240	115	260	290	209
	MAY-SEP	240	275	295	114	315	350	259

LOWER COLUMBIA BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

LOWER COLUMBIA BASIN
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Sandy	7	76	128

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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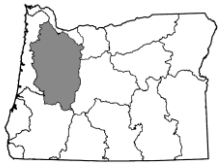
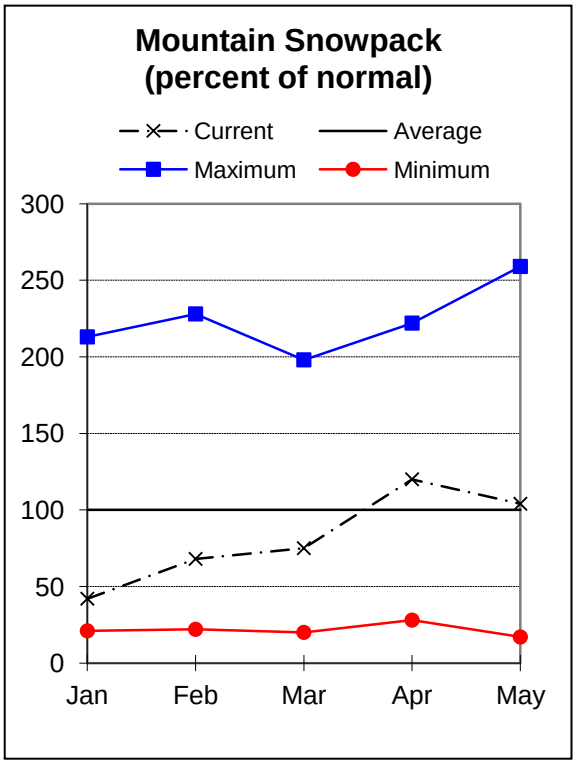
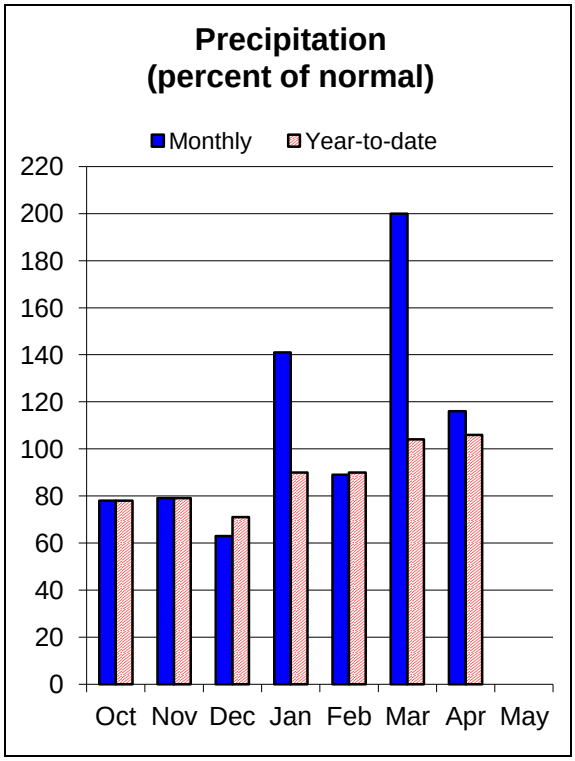
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/



Willamette Basin

May 1, 2012





Water Supply Outlook

The Willamette basin snowpack remains above normal as of May 1, especially in the middle elevation band between 3500 and 4500 ft. While snow melt was in full swing at every SNOTEL site in the basin during the record-breaking heat of late April, wintry weather returned and slowed the snow melt at many sites as of May 1. Most sites above 4500 ft recorded new snowfall during the last few days of April. As of May 1, the Willamette basin snowpack was 104 percent of average and only 5 out of 22 SNOTEL sites were snow-free.

Precipitation for the month of April was 116 percent of average. Since the beginning of water year 2012, precipitation in the basin has been 106 percent of average.

The May 1 storage at Timothy Lake and Henry Hagg reservoirs was 101 percent of average and at 97 percent of capacity.

Summer streamflows in the Willamette basin are forecast to be near normal to above normal for the coming summer. The May through September streamflow forecasts for the basin range from 102 percent of average for Blue Lake Inflow to 134 percent of average for Fern Ridge Lake Inflow. Elsewhere in the basin, the McKenzie near Vida is forecast to be 109 percent of average and the Willamette River at Salem is forecast to be 115 percent of average for the same period.

For more information contact your local Natural Resources Conservation Service office:
Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499;
Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

WILLAMETTE BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Blue Lake Inflow (1,2)	MAY-JUN	19.2	36	44	102	52	69	43
	MAY-SEP	23	40	48	102	56	73	47
Clackamas R at Estacada	MAY-JUL	380	440	480	115	520	580	418
	MAY-SEP	495	560	605	115	650	715	526
Clackamas R ab Three Lynx (2)	MAY-JUL	295	335	360	115	385	425	312
	MAY-SEP	390	430	460	115	490	530	400
Cottage Grove Lake Inflow (1,2)	MAY-JUN	2.3	15.2	21	115	27	40	18.2
	MAY-SEP	3.3	16.8	23	115	29	43	20
Cougar Lake Inflow (1,2)	MAY-JUN	85	113	126	108	139	167	117
	MAY-SEP	131	163	177	110	191	225	161
Detroit Lake Inflow (1,2)	MAY-JUN	235	315	355	124	395	475	286
	MAY-SEP	385	490	535	122	580	685	438
Dorena Lake Inflow (1,2)	MAY-JUN	20	61	80	123	99	140	65
	MAY-SEP	31	73	92	123	111	153	75
Fall Creek Lake Inflow (1,2)	MAY-JUN	16.7	46	60	115	74	103	52
	MAY-SEP	4.4	47	67	106	87	130	63
Fern Ridge Lake Inflow (1,2)	MAY-JUN	8.4	19.8	25	134	30	42	18.6
	MAY-SEP	0.5	8.6	14.2	134	19.8	32	10.6
Foster Lake Inflow (1,2)	MAY-JUN	210	255	275	109	295	340	253
	MAY-SEP	275	325	345	108	365	415	321
Green Peter Lake Inflow (1,2)	MAY-JUN	87	148	176	105	205	265	168
	MAY-SEP	126	194	225	105	255	325	215

For more information contact your local Natural Resources Conservation Service office:
Eugene - (541) 465-6436; Portland - (503) 231-2270; Tangent - (541) 967-5925; Oregon City - (503) 656-3499; Hillsboro - (503) 648-3174; McMinnville - (503) 472-1474
Salem - (503) 399-5746; Dallas - (503) 623-5534
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

WILLAMETTE BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Hills Creek Reservoir Inflow (1,2)	MAY-JUN	114	156	175	114	194	235	154
	MAY-SEP	189	235	255	113	275	320	225
Little North Santiam R nr Mehama (1)	MAY-JUN	37	70	85	120	100	133	71
	MAY-SEP	52	89	106	119	123	160	89
Lookout Point Lake Inflow (1,2)	MAY-JUN	285	400	450	114	500	615	395
	MAY-SEP	445	580	640	115	700	835	558
MF Willamette R bl NF (1,2)	MAY-JUN	270	375	420	114	465	570	370
	MAY-SEP	440	560	615	113	670	790	545
McKenzie R bl Trail Bridge (2)	MAY-JUL	179	198	210	109	220	240	193
	MAY-SEP	260	285	300	108	315	340	279
McKenzie R nr Vida (1,2)	MAY-JUN	405	520	570	110	620	735	519
	MAY-SEP	765	905	970	109	1030	1180	888
Mohawk R nr Springfield	MAY-JUL	27	41	50	119	59	73	42
Oak Grove Fork Of Clackamas	MAY-JUL	95	103	109	121	115	123	90
	MAY-SEP	135	146	153	121	160	171	127
North Santiam R at Mehama (1,2)	MAY-JUN	295	410	465	119	520	635	390
	MAY-SEP	470	615	680	119	745	890	572
South Santiam R at Waterloo (2)	MAY-JUN	121	198	250	125	300	380	200
	MAY-SEP	305	385	440	125	495	575	353
Scoggins Ck nr Gaston (2)	MAY-JUL	2.9	4.8	6.0	111	7.2	9.1	5.4
Thomas Ck nr Scio	MAY-JUL	23	38	48	123	58	73	39
Willamette R at Salem (1,2)	MAY-JUN	1590	2240	2530	115	2820	3470	2203
	MAY-SEP	2470	3180	3500	115	3820	4530	3036

For more information contact your local Natural Resources Conservation Service office:
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Salem - (503) 399-5746; Dallas - (503) 623-5534
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

WILLAMETTE BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
BLUE RIVER	85.5	76.2	69.9	70.1
COTTAGE GROVE	29.8	27.5	23.8	25.9
COUGAR	155.2	169.6	122.8	188.3
DETROIT	300.7	412.7	268.2	293.6
DORENA	70.5	62.3	53.7	62.0
FALL CREEK	115.5	111.3	99.5	96.8
FERN RIDGE	109.6	96.9	93.6	93.4
FOSTER	29.7	24.9	3.3	11.7
GREEN PETER	268.2	399.5	230.8	286.4
HILLS CREEK	200.2	264.4	172.9	209.8
LOOKOUT POINT	337.0	381.2	272.6	265.0
TIMOTHY LAKE	61.7	57.9	58.5	56.9
HENRY HAGG LAKE	53.0	53.3	53.3	52.7

WILLAMETTE BASIN
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Clackamas	4	66	146
McKenzie	7	61	91
Row River	1	49	69
Santiam	6	50	98
Middle Fork Willamette	7	60	96

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

For more information contact your local Natural Resources Conservation Service office:
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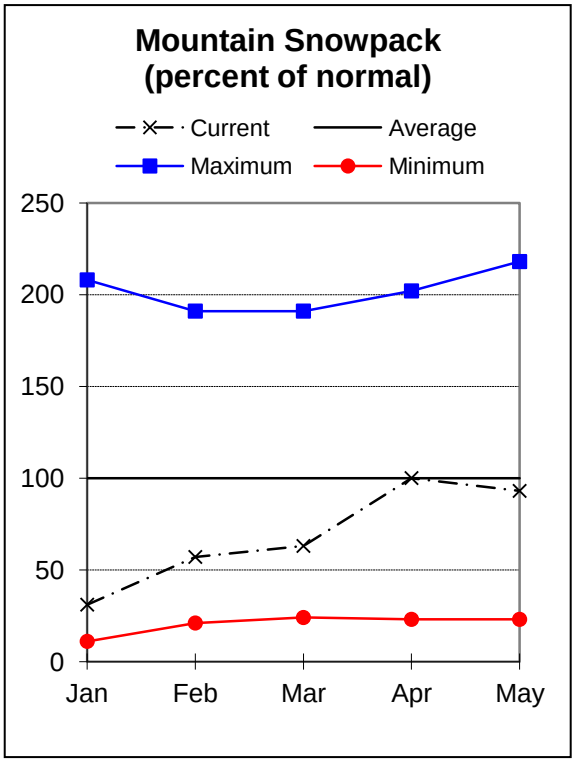
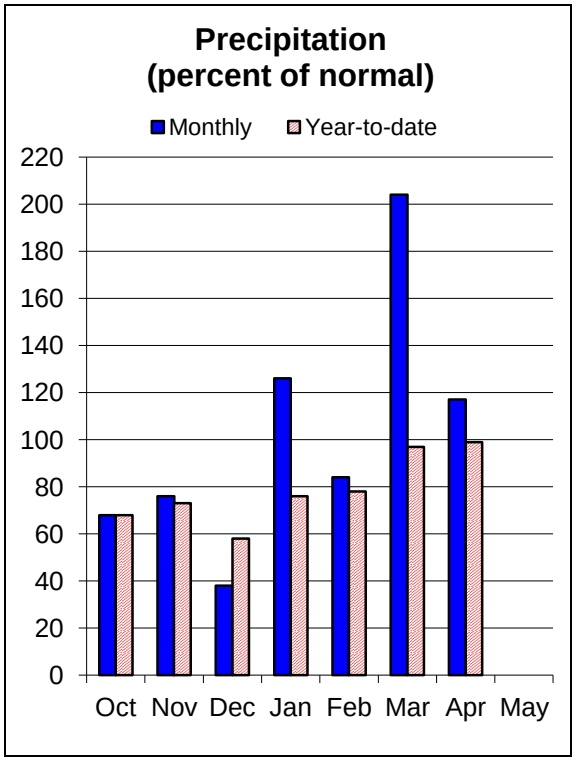
Rogue and Umpqua Basins

May 1, 2012





Water Supply Outlook

April is normally a month dominated by snowmelt in the mountains of the Rogue and Umpqua basins. This year, April was punctuated by two winter storms that each brought several inches of snow to many SNOTEL sites in southwestern Oregon. However, record high temperatures in late April started up the snowmelt engine at all elevations. As of May 1, the Rogue and Umpqua basin snowpack was 93 percent of average and 6 of 20 snow measurement sites in the basin were snow-free.

Precipitation for April was 117 percent of average in the Rogue and Umpqua basins. Since October 1, the water year precipitation has been 99 percent of average.

The May 1 storage at 5 irrigation reservoirs in the Rogue and Umpqua basins was 113 percent of average and at 93 percent of capacity.

The May through September streamflow forecasts range from 93 percent of average for the Rogue River at Raygold to 141 percent of average for the Illinois River at Kerby. Elsewhere in the basin, the South Umpqua River near Brockway is forecast to be 138 percent of average the same period. Water users in the basin can expect near normal to above normal streamflows for the coming summer.

For more information contact your local Natural Resources Conservation Service office:
Roseburg - (541) 673-8316; Medford - (541) 776-4267
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

ROGUE AND UMPQUA BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Applegate Lake Inflow (2)	MAY-JUL	57	69	78	108	87	99	72
	MAY-SEP	62	75	84	108	93	106	78
SF Big Butte Ck nr Butte Falls	MAY-JUL	14.9	19.1	22	100	25	29	22
	MAY-SEP	22	28	31	100	34	40	31
Cow Ck nr Azalea (2)	MAY-JUL	4.5	7.8	10.0	127	12.2	15.5	7.9
	MAY-SEP	5.6	9.1	11.5	126	13.9	17.4	9.1
Hyatt Prairie Reservoir Inflow (2)	MAY-JUL	0.9	1.9	2.6	108	3.3	4.3	2.4
Illinois R at Kerby	MAY-JUL	75	101	119	143	137	163	83
	MAY-SEP	82	109	127	141	145	172	90
NF Little Butte Ck nr Lakecreek (2)	MAY-JUL	19.4	23	26	104	29	33	25
	MAY-SEP	32	37	41	104	45	50	40
Lost Creek Lake Inflow (2)	MAY-JUL	310	350	375	99	400	440	380
	MAY-SEP	425	475	505	98	535	585	515
Rogue R at Raygold (2)	MAY-JUL	310	395	450	94	505	590	480
	MAY-SEP	450	540	600	93	660	750	645
Rogue R at Grants Pass (2)	MAY-JUL	320	410	470	100	530	620	470
	MAY-SEP	450	550	615	100	680	780	615
Sucker Ck bl Ltl Grayback Ck nr Holl	MAY-JUL	28	34	38	123	42	48	31
	MAY-SEP	33	39	43	123	47	53	35
North Umpqua R at Winchester	MAY-JUL	470	565	630	129	695	790	490
	MAY-SEP	630	725	790	129	855	950	615
South Umpqua R nr Brockway	MAY-JUL	148	215	265	139	315	380	191
	MAY-SEP	168	240	290	138	340	410	210
South Umpqua R at Tiller	MAY-JUL	66	98	120	113	142	174	106
	MAY-SEP	75	108	130	112	152	185	116

For more information contact your local Natural Resources Conservation Service office:
Roseburg - (541) 673-8316; Medford - (541) 776-4267
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

ROGUE AND UMPQUA BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
APPLEGATE	75.2	60.2	63.1	64.5
EMIGRANT LAKE	39.0	38.6	38.3	35.9
FISH LAKE	8.0	6.7	5.4	6.2
FOURMILE LAKE	16.1	14.6	10.9	11.0
HOWARD PRAIRIE	60.0	54.3	60.5	48.8
HYATT PRAIRIE	16.1	15.8	15.9	13.3
LOST CREEK	315.0	305.5	160.6	283.2

ROGUE AND UMPQUA BASINS
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Applegate	5	69	97
Bear Creek	4	75	98
Little Butte Creek	6	42	89
Illinois	1	27	85
North Umpqua	7	55	100
Rogue River above Grants	20	57	94

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

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(2) - The value is natural volume - actual volume may be affected by upstream water management.

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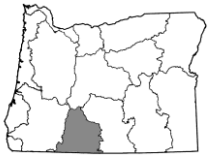
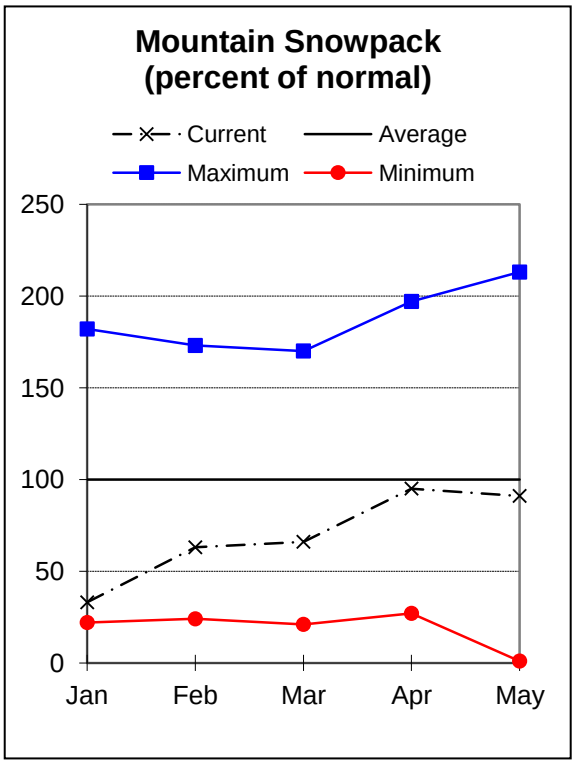
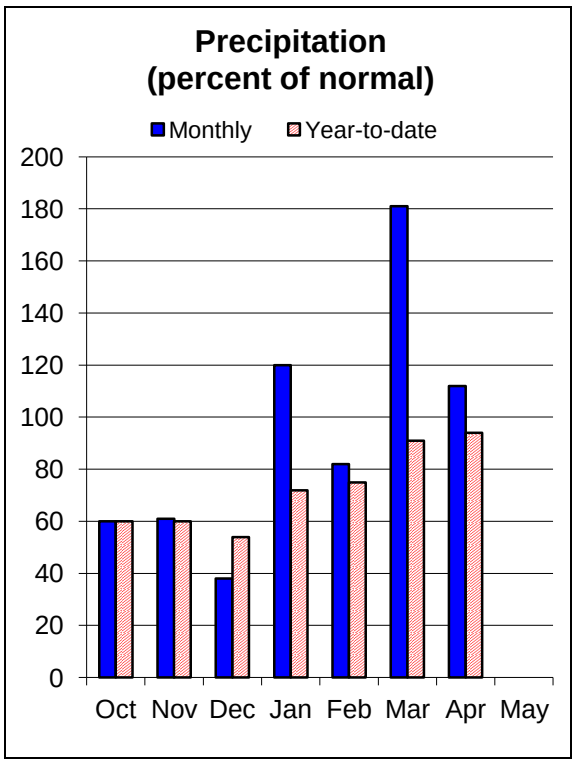


Klamath Basin

May 1, 2012





Water Supply Outlook

An unusual spring storm in mid-April brought snowfall to the mid- and upper elevations of the Klamath Basin. This storm paused the snowmelt at many sites briefly, but it began again in earnest during a late-April heat streak with record high air temperatures. As of May 1, the Klamath basin snowpack was 91 percent of average and 7 of 20 snow measurement sites in the basin were snow free.

Precipitation for the month of April was 112 percent of average in the Klamath basin. Since the beginning of water year 2012, precipitation in the basin has been 94 percent of average.

The May 1 storage at Upper Klamath Lake, Clear Lake (CA) and Gerber reservoirs was 84 percent of average and at 61 percent of capacity.

The streamflow forecasts in the Klamath basin increased slightly since last month's report, but remain below normal. The May through September streamflow forecasts for the basin range from 73 percent of average for Gerber Reservoir Inflow to 94 percent of average for the Williamson River below Sprague. Water users in the basin can expect below normal to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Klamath Falls - (541) 883-6932
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

KLAMATH BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Clear Lake Inflow (2)	MAY-JUL	0.8	9.3	16.0	83	23	33	19.3
	MAY-SEP	6.0	14.9	21	81	27	36	26
Gerber Res Inflow (2)	MAY-JUL	0.2	1.0	4.4	69	8.5	14.5	6.4
	MAY-SEP	0.1	0.8	4.8	73	8.8	14.7	6.6
Sprague R nr Chiloquin	MAY-JUL	75	102	120	94	138	165	128
	MAY-SEP	92	121	140	91	159	188	154
Upper Klamath Lk Inflow (1)	MAY-JUL	158	220	245	96	270	330	255
	MAY-SEP	225	290	320	94	350	415	340
Williamson R bl Sprague R nr Chiloqu	MAY-JUL	145	175	195	95	215	245	205
Williamson R nr Chiloquin	MAY-SEP	198	230	250	94	270	300	265

KLAMATH BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
CLEAR LAKE (CALIF)	513.3	130.0	182.4	264.3
GERBER	94.3	64.1	74.9	72.9
UPPER KLAMATH LAKE	523.7	493.1	500.6	483.4

KLAMATH BASIN
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Lost	2	44	0
Sprague	5	36	78
Upper Klamath Lake	7	58	94
Williamson River	5	60	94

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.
The average is computed for the 1971-2000 base period.
(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural volume - actual volume may be affected by upstream water management.

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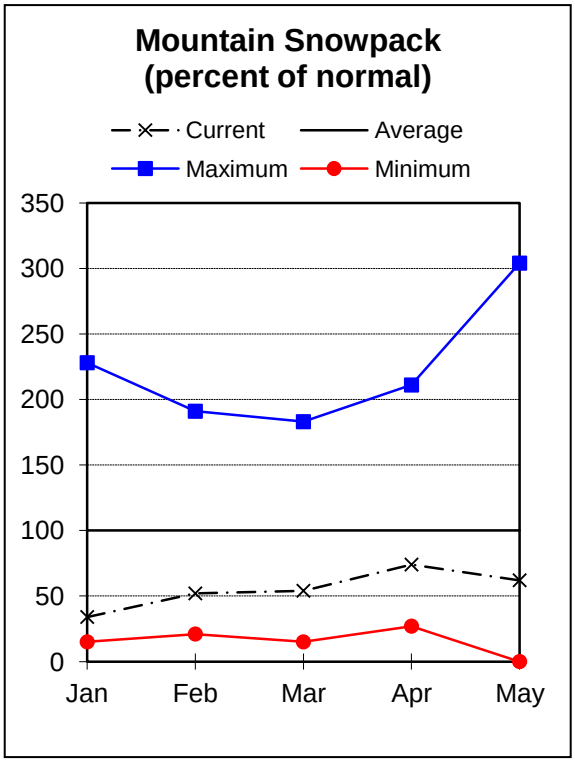
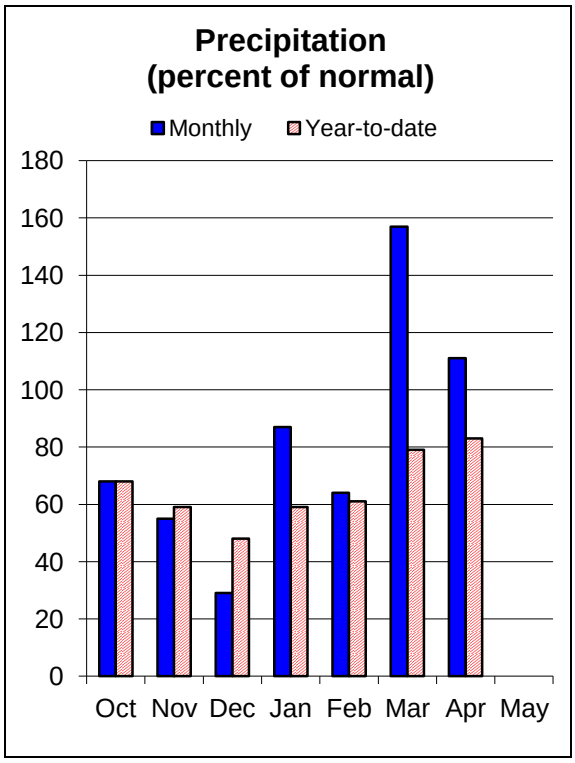
Lake County and Goose Lake

May 1, 2012





Water Supply Outlook

The Lake County and Goose Lake basins had a second month in a row of wetter than average conditions, after a very long dry period. April precipitation was 111 percent of average. The water year precipitation since October 1 has been 83 percent of average.

April storms brought unusual spring snow to many SNOTEL sites in the basin, which gave a small boost to the region's snowpack that has been consistently below normal all winter. However, snowmelt was in full swing between storms and during the record-breaking hot weather at the end of April. As of May 1, the Lake County and Goose Lake basin snowpack was 62 percent of average and only 4 of 9 SNOTEL sites in the basin still had snow.

Reservoir storage in the Lake County and Goose Lake basins remains above average, which may provide some relief from low water supply conditions. May 1 storage at Cottonwood and Drews reservoirs was 116 percent of average and at 94 percent of capacity.

Summer streamflow forecasts in the Lake County and Goose Lake basins increased slightly since April 1, but remain below average. The May through September streamflow forecasts for the basin range from 64 percent of average for Deep Creek near Adel and Honey Creek near Plush to 92 percent of average for Silver Creek near Silver Lake. Water users in the basin can expect well below to near normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Lakeview - (541) 947-2202
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

LAKE COUNTY AND GOOSE LAKE BASINS
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Chewaucan R nr Paisley	MAY-JUL	23	34	41	79	48	59	52
	MAY-SEP	26	37	44	79	51	62	56
Deep Ck ab Adel	MAY-JUL	10.6	22	29	64	36	47	45
	MAY-SEP	11.4	22	30	64	38	49	47
Honey Ck nr Plush	MAY-JUL	0.5	4.3	6.8	63	9.3	13.0	10.8
	MAY-SEP	0.7	4.4	7.0	64	9.6	13.3	11.0
Silver Ck nr Silver Lake (2)	MAY-JUL	0.5	3.2	5.0	92	6.8	9.5	5.4
	MAY-SEP	0.9	3.6	5.5	92	7.4	10.1	6.0
Twentymile Ck nr Adel	MAY-JUL	0.7	3.8	8.7	82	13.6	21	10.6
	MAY-SEP	0.7	4.3	9.2	83	14.1	21	11.1

LAKE COUNTY AND GOOSE LAKE BASINS
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
COTTONWOOD	8.7	8.4	9.3	6.7
DREWS	63.0	58.7	63.5	51.0

LAKE COUNTY AND GOOSE LAKE BASINS
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Chewaucan River	3	36	85
Deep Creek	0	0	0
Drew Creek	2	0	0
Honey Creek	0	0	0
Silver Creek (Lake Co.)	4	30	78
Twentymile Creek	0	0	0

*

90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.
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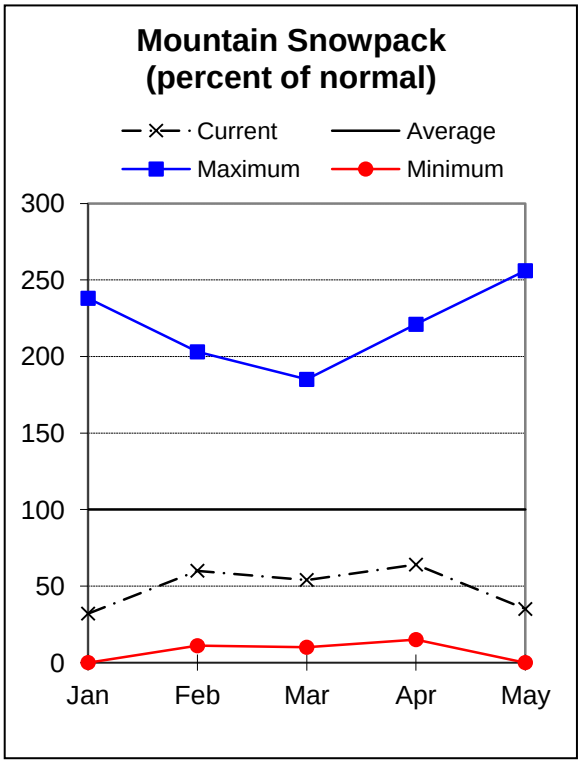
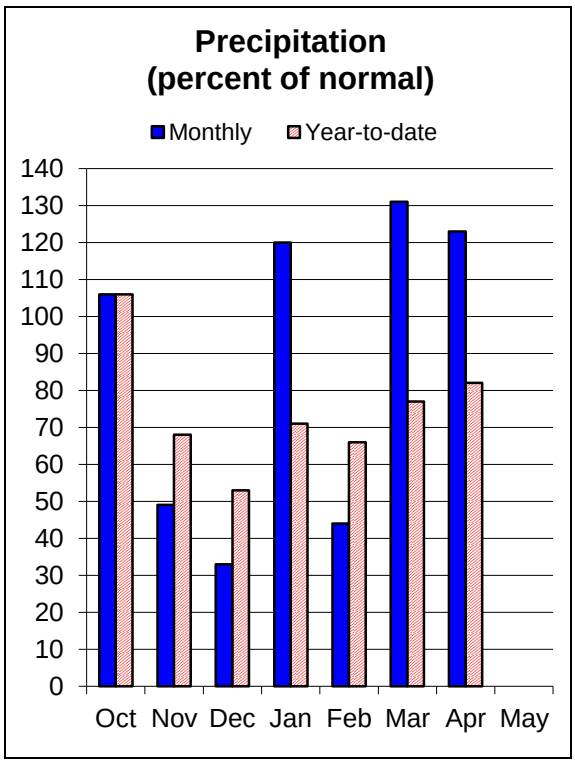
Harney Basin

May 1, 2012





Water Supply Outlook

April was punctuated by several snow storms in the higher elevations of the Harney basin. This slowed the snowmelt at many SNOTEL sites in the region. However, the below normal snowpack levels that have persisted all winter, combined with record high air temperature in late April, caused the snow at most SNOTEL sites to melt out several weeks earlier than normal. Starr Mountain SNOTEL experienced a record high air temperature on April 23 of 77 degrees Fahrenheit, which was over 14 degrees higher than the previous record for that day. Only 2 of 9 SNOTEL sites in the basin had snow remaining as of May 1.

April precipitation was 123 percent of average in the Harney Basin. Since the beginning of water year 2012, precipitation in the basin has been 82 percent of average, the lowest in the state.

Summer streamflow forecasts in the Harney basin vary significantly. The May through September streamflow forecasts in the basin range from 30 percent of average for Trout Creek near Denio to 89 percent of average for the Silvies River near Burns. Depending on their location, water users in the basin can expect significantly below normal to slightly below normal streamflows for the summer of 2012.

For more information contact your local Natural Resources Conservation Service office:
Hines - (541) 573-6446
Or visit: http://www.or.nrcs.usda.gov/snow/watersupply/

HARNEY BASIN
Streamflow Forecasts - May 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Donner Und Blitzen R nr Frenchglen	MAY-JUL	12.2	25	33	66	41	54	50
	MAY-SEP	15.3	28	37	66	46	59	56
Silvies R nr Burns	MAY-JUL	14.9	32	44	90	56	73	49
	MAY-SEP	16.2	34	46	89	58	76	52
Trout Ck nr Denio	MAY-JUL	0.2	0.8	2.0	27	3.1	4.8	7.2
	MAY-SEP	0.3	1.2	2.3	30	3.4	5.1	7.8

HARNEY BASIN
Reservoir Storage (1000 AF) - End of April

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

HARNEY BASIN
Watershed Snowpack Analysis - May 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Donner und Blitzen River	2	25	42
Silver Creek (Harney Co.)	2	0	0
Silvies River	5	11	24
Trout Creek	2	33	56

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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Recession Flow Forecasts

Recession flow forecasts are presented below for key streamflow sites where reliable, daily streamflow data are available. The recession flow forecasts use exceedance probabilities in a format similar to the standard water supply forecasts presented in this document. Each forecast provides a range of possible outcomes representing the uncertainty of forecasting models.

The types of forecasts in the table below are:
1) Threshold flow -- Date that the daily streamflow rate falls below the given threshold flow
2) Peak flow -- Maximum daily flow
3) Date of peak flow -- Date of occurrence of maximum daily flow
4) Average daily flow on a given date

OWYHEE AND MALHEUR BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Owyhee R nr Rome	2000 cfs	Observed on April 3rd			**May 6**
Owyhee R nr Rome	1000 cfs	Observed on April 6th			**May 18**
Owyhee R nr Rome	500 cfs	Imminent			**Jun 2**

UPPER JOHN DAY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
John Day R at Service Creek	Average Daily Flow on Aug. 1st	10.8	163	350	**271**

UPPER DESCHUTES AND CROOKED BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ----------*			*LONG-TERM AVERAGE VALUE*
		90%	*50%*	*10%*	
Crane Prairie Inflow	Date of Peak	May 19	June 2	Jun 16	**May 25**
Crane Prairie Inflow	Peak Flow	360	480	600	**403**
Crane Prairie Inflow	Average Daily Flow on Oct. 1st	260	295	330	**269**
Prineville Reservoir Inflow	113 cfs	May 14	June 03	Jun 23	**June 3**
Prineville Reservoir Inflow	75 cfs	May 20	June 09	Jun 29	**June 11**
Prineville Reservoir Inflow	50 cfs	May 26	Jun 16	Jul 07	**June 19**
Whychus Creek nr Sisters	100 cfs	Aug 07	Aug 30	Sep 21	**August 16**

ROGUE AND UMPQUA BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
South Umpqua R nr Brockway	90 cfs	Aug 04	Aug 20	Sept 05	**August 8**
South Umpqua R at Tiller	140 cfs	Jul 14	Aug 01	Aug 19	**July 11**
South Umpqua R at Tiller	90 cfs	Aug 05	Aug 23	Sep 10	**August 1**
South Umpqua R at Tiller	60 cfs	Aug 30	Sep 23	Oct 17	**August 28**

LAKE COUNTY AND GOOSE LAKE BASINS					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
Deep Ck ab Adel	100 cfs	May 15	May 21	Jun 05	**June 17**
Honey Ck nr Plush	100 cfs	Prediction cannot be verified			**May 16**
Honey Ck nr Plush	50 cfs	Apr 15	May 08	May 31	**June 4**
Twentymile Ck nr Adel	50 cfs	Observed on May 2nd			**May 30**
Twentymile Ck nr Adel	10 cfs	May 20	Jun 06	Jun 18	**July 20**

HARNEY BASIN					
FORECAST POINT	*FORECAST THRESHOLD*	*FORECAST VALUE ---------- CHANCE OF EXCEEDING ---------- 90%*	*50%*	*10%*	*LONG-TERM AVERAGE VALUE*
Silvies R nr Burns	400 cfs	Imminent			**May 21**
	200 cfs	May 10	May 18	May 25	**June 2**
	100 cfs	May 15	May 26	June 10	**June 13**
	50 cfs	June 04	Jun 18	Jul 01	**July 3**
Donner Und Blitzen R nr Frenchglen	200 cfs	May 26	Jun 10	Jun 25	**June 20**
Donner Und Blitzen R nr Frenchglen	100 cfs	Jun 16	Jul 01	Jul 16	**July 9**

Summary of Snow Course Data

May 2012

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon						
ANEROID LAKE SNOTEL	7400	5/01/12	58	23.0	27.4	26.2
ANNIE SPRING SNOTEL	6010	5/01/12	87	34.8	57.0	39.7
ARBUCKLE MTN SNOTEL	5770	5/01/12	10	4.4	20.6	15.0
BALD PETER	5400	5/02/12	69	29.8	34.8	--
BEAR GRASS SNOTEL	4720	5/01/12	104	51.1	--	--
BEAVER CREEK #1	4250	5/03/12	20	8.0	11.8	--
BEAVER CREEK #2	4250	5/03/12	3	.6	4.2	--
BEAVER DAM CREEK	5100	5/01/12	2	.8	13.9	4.1
BEAVER RES. SNOTEL	5150	5/01/12	0	.0	13.9	1.4
BIG RED MTN SNOTEL	6050	5/01/12	58	24.5	39.8	26.4
BIGELOW CAMP SNOTEL	5130	5/01/12	9	5.5	20.4	6.5
BILLIE CK DVD SNOTEL	5280	5/01/12	24	12.9	24.4	10.2
BLAZED ALDER SNOTEL	3650	5/01/12	67	32.0	46.5	23.3
BLUE MTN SPGS SNOTEL	5870	5/01/12	9	4.1	16.4	8.3
BOURNE SNOTEL	5850	5/01/12	0	.5	18.5	9.1
BOWMAN SPRNGS SNOTEL	4530	5/01/12	0	.0	4.4	.8
CALIBAN ALT	6500	4/30/12	75	32.6	38.4	31.5
CASCADE SUM. SNOTEL	5100	5/01/12	53	23.3	54.0	27.9
CHEMULT ALT SNOTEL	4850	5/01/12	0	.0	2.5	.7
CLACKAMAS LK. SNOTEL	3400	5/01/12	5	5.2	7.1	2.3
CLEAR LAKE SNOTEL	3810	5/01/12	15	5.9	12.4	5.8
COLD SPRINGS SNOTEL	5940	5/01/12	43	20.3	39.7	21.3
COUNTY LINE SNOTEL	4830	5/01/12	0	.0	.0	.4
CRAZYMAN FLAT SNOTEL	6180	5/01/12	13	7.4	20.2	6.3
DALY LAKE SNOTEL	3690	5/01/12	15	6.8	17.3	3.9
DEADWOOD JUNCTION	4600	5/01/12	0	.0	2.2	.8
DERR SNOTEL	5850	5/01/12	0	.0	15.3	6.5
DIAMOND LAKE SNOTEL	5280	5/01/12	14	7.3	23.6	6.3
EILERTSON SNOTEL	5510	5/01/12	0	.0	14.9	3.4
EMIGRANT SPGS SNOTEL	3800	5/01/12	0	.0	.0	.1
FISH CREEK SNOTEL	7660	5/01/12	48	17.5	52.5	28.6
FISH LK. SNOTEL	4660	5/01/12	9	4.0	13.1	1.4
FOURMILE LAKE SNOTEL	5970	5/01/12	44	18.8	30.9	23.5
GERBER RES SNOTEL	4890	5/01/12	0	.0	.0	.0
GOLD CENTER SNOTEL	5410	5/01/12	0	.0	6.4	1.0
GREENPOINT SNOTEL	3310	5/01/12	15	6.7	14.8	4.4
HIGH RIDGE SNOTEL	4920	5/01/12	30	13.2	29.6	15.9
HOGG PASS SNOTEL	4790	5/01/12	54	20.2	30.4	34.3
HOLLAND MDWS SNOTEL	4930	5/01/12	23	11.8	24.2	17.0
HOWARD PRAIRIE	4500	5/01/12	0	.0	2.1	.9
IRISH-TAYLOR SNOTEL	5540	5/01/12	90	35.2	44.1	38.8
JUMP OFF JOE SNOTEL	3520	5/01/12	12	4.1	17.9	3.5
KING MTN #1	4500	5/01/12	5	1.8	12.7	2.8
KING MTN #2 SNOTEL	4340	5/01/12	0	.0	9.3	.9
KING MTN #3	3650	5/01/12	0	.0	1.0	.0
KING MTN #4	3050	5/01/12	0	.0	--	.0
LAKE CK R.S. SNOTEL	5240	5/01/12	0	.0	4.1	1.3
LITTLE MEADOW SNOTEL	4020	5/01/12	61	28.4	46.3	16.9
LUCKY STRIKE SNOTEL	4970	5/01/12	0	.0	9.1	2.7
MADISON BUTTE SNOTEL	5150	5/01/12	0	.0	.2	.4
MARION FORKS SNOTEL	2590	5/01/12	19	9.5	6.5	3.6
MARKS CREEK	4540	4/30/12	0	.0	.0	.1
MCKENZIE SNOTEL	4770	5/01/12	87	45.1	58.2	40.0
MILKSHAKES SNOTEL	5580	5/01/12	88	43.2	--	--
MOSS SPRINGS SNOTEL	5760	5/01/12	43	18.8	35.1	22.3
MT ASHLAND SWBK.	6400	4/30/12	74	32.3	39.2	33.0
MT HOOD TEST SNOTEL	5370	5/01/12	137	63.1	68.2	63.9
MT HOWARD SNOTEL	7910	5/01/12	32	19.5	20.0	16.9

SNOW COURSE		ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
Oregon (continued)							
MUD RIDGE	SNOTEL	4070	5/01/12	60	24.9	29.8	18.2
NEW CRESCENT	SNOTEL	4910	5/01/12	0	.0	8.9	3.0
NORTH FK RES	SNOTEL	3060	5/01/12	56	24.2	35.7	6.9
OCHOCO MEADOW	SNOTEL	5430	5/01/12	0	.0	9.2	1.8
PARK H.Q. REV		6550	5/01/12	128	61.2	79.4	63.1
PEAVINE RIDGE	SNOTEL	3420	5/01/12	16	7.9	17.2	3.7
QUARTZ MTN	SNOTEL	5720	5/01/12	0	.0	.0	.1
RACING CREEK		4800	5/02/12	---	10.0E	15.6	--
R.R. OVERPASS	SNOTEL	2680	5/01/12	0	.0	.0	.0
RED BUTTE #1		4560	4/30/12	15	6.8	22.8	6.7
RED BUTTE #2		4000	4/30/12	0	.0	2.2	2.1
RED BUTTE #3		3500	4/30/12	0	.0	--	.2
RED BUTTE #4		3000	4/30/12	0	.0	--	.0
RED HILL	SNOTEL	4410	5/01/12	95	55.5	68.8	42.5
ROARING RIVER	SNOTEL	4950	5/01/12	54	27.4	40.8	24.0
ROCK SPRINGS	SNOTEL	5290	5/01/12	0	.0	.0	.1
SADDLE MTN	SNOTEL	3110	5/01/12	0	.0	4.2	--
SALT CK FALLS	SNOTEL	4220	5/01/12	27	12.5	36.2	10.5
SANTIAM JCT.	SNOTEL	3740	5/01/12	0	.1	19.5	8.0
SCHNEIDER MDW	SNOTEL	5400	5/01/12	38	16.7	32.6	20.2
SEINE CREEK	SNOTEL	2060	5/01/12	0	.0	.0	.0
SEVENMILE MARSH	SNTL	5700	5/01/12	46	18.3	43.7	22.6
SILVER BURN		3720	5/01/12	0	.0	13.5	.9
SILVER CREEK	SNOTEL	5740	5/01/12	0	.0	8.9	1.6
SILVIES	SNOTEL	6990	5/01/12	0	.0	17.7	13.3
SKI BOWL ROAD		6000	4/30/12	52	22.2	32.2	23.1
SMITH RIDGE	SNOTEL	3330	5/01/12	0	.0	--	--
SNOW MTN	SNOTEL	6220	5/01/12	0	.0	15.3	7.4
SF BULL RUN	SNOTEL	2690	5/01/12	0	.0	7.5	.1
STARR RIDGE	SNOTEL	5250	5/01/12	0	.0	.0	.0
STRAWBERRY	SNOTEL	5770	5/01/12	0	.0	1.0	.8
SUMMER RIM	SNOTEL	7080	5/01/12	28	9.0	25.2	13.0
SUMMIT LAKE	SNOTEL	5610	5/01/12	96	40.8	51.9	39.4
SUN PASS	SNOTEL	5400	5/01/12	14	5.9	18.2	--
SWAN LAKE MTN	SNOTEL	6830	5/01/12	36	15.5	34.1	--
TAYLOR BUTTE	SNOTEL	5030	5/01/12	0	.0	.2	.1
TAYLOR GREEN	SNOTEL	5740	5/01/12	14	5.3	27.8	10.3
THREE CK MEAD	SNOTEL	5690	5/01/12	42	13.2	28.8	15.3
TIPTON	SNOTEL	5150	5/01/12	0	.0	13.9	4.8
TOKETEE AIRSTRIP	SN	3240	5/01/12	0	.0	.0	.1
WOLF CREEK	SNOTEL	5630	5/01/12	6	1.8	20.7	9.8
California							
ADIN MOUNTAIN		6350	4/27/12	5	1.8	16.1	6.5
ADIN MTN	SNOTEL	6190	5/01/12	0	.0	15.2	6.8
CEDAR PASS	SNOTEL	7030	5/01/12	9	4.3	27.8	14.3
CROWDER FLAT	SNOTEL	5170	5/01/12	0	.0	.0	.0
DISMAL SWAMP	SNOTEL	7360	5/01/12	50	17.2	49.5	24.9
Idaho							
MUD FLAT	SNOTEL	5730	5/01/12	0	.0	.0	.0
SOUTH MTN	SNOTEL	6500	5/01/12	0	.0	22.8	9.4
Nevada							
BEAR CREEK	SNOTEL	7800	5/01/12	7	2.0	32.7	19.0
BIG BEND	SNOTEL	6700	5/01/12	0	.0	11.1	2.3
BUCKSKIN,L	SNOTEL	6700	5/01/12	0	.0	18.1	3.7
DISASTER PEAK	SNOTEL	6500	5/01/12	0	.0	.0	2.9
FAWN CREEK	SNOTEL	7050	5/01/12	0	.0	25.2	14.5
GRANITE PEAK	SNOTEL	7800	5/01/12	13	4.4	37.8	24.2
JACK CREEK, U	SNOTEL	7280	5/01/12	0	.0	23.3	17.0
LAMANCE CREEK	SNOTEL	6000	5/01/12	0	.0	5.3	3.9
LAUREL DRAW	SNOTEL	6700	5/01/12	0	.0	10.9	1.6
SEVENTYSIX CK	SNOTEL	7100	5/01/12	0	.0	8.7	3.9
TAYLOR CANYON	SNOTEL	6200	5/01/12	0	.0	.0	.3

(d) denotes discontinued site.

Basin Outlook Reports: How Forecasts Are Made

Federal – State – Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:

USDA, Natural Resources Conservation Service
Snow Survey Office
1201 NE Lloyd Suite 900
Portland, OR 97232

Phone: (503) 414-3270 **Web site: *http://www.or.nrcs.usda.gov/snow/index.html***

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount. By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Interpreting Water Supply Forecasts

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

90 Percent Chance of Exceedance Forecast. There is a 90 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 10 percent chance that the actual streamflow volume will be less than this forecast value.

70 Percent Chance of Exceedance Forecast. There is a 70 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 30 percent chance that the actual streamflow volume will be less than this forecast value.

50 Percent Chance of Exceedance Forecast. There is a 50 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 50 percent chance that the actual streamflow volume will be less than this forecast value. Generally, this forecast is the middle of the range of possible streamflow volumes that can be produced given current conditions.

30 Percent Chance of Exceedance Forecast. There is a 30 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 70 percent chance that the actual streamflow volume will be less than this forecast value.

10 Percent Chance of Exceedance Forecast. There is a 10 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 90 percent chance that the actual streamflow volume will be less than this forecast value.

*Note: There is still a 20 percent chance that actual streamflow volumes will fall either below the 90 percent exceedance forecast or above the 10 percent exceedance forecast.

These forecasts represent the uncertainty inherent in making streamflow predictions. This uncertainty may include sources such as: unknown future weather conditions, uncertainties associated with the various prediction methodologies, and the spatial coverage of the data network in a given basin.

30-Year Average. The 30-year average streamflow for each forecast period is provided for comparison. The average is based on data from 1971-2000. The % AVG. column compares the 50% chance of exceedance forecast to the 30-year average streamflow; values above 100% denote when the 50% chance of exceedance forecast would be greater than the 30-year average streamflow.

AF - Acre-feet, forecasted volume of water are typically in thousands of acre-feet.

These forecasts are given to users to help make risk-based decisions. Users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for.

To Decrease the Chance of Having Less Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive less than this amount). To reduce the risk of having less water than planned for, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded such as the 90 or 70 percent exceedance forecasts.

To Decrease the Chance of Having More Water than Planned for: A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive more than this amount). To reduce the risk of having more water than planned for, users can base their operational decisions on one of the forecasts with a lesser chance of being exceeded such as the 30 or 10 percent exceedance forecasts.

Using the forecasts - an Example

Using the 50 Percent Exceedance Forecast. Using the example forecasts shown below, there is a 50% chance that actual streamflow volume at the Boise River near Twin Springs will be less than 685 KAF between April 1 and July 31. There is also a 50% chance that actual streamflow volume will be greater than 685 KAF.

Using the 90 and 70 Percent Exceedance Forecasts. If an unexpected shortage of water could cause problems (such as irrigated agriculture), users might want to plan on receiving 610 KAF (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 610 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 443 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 443 KAF.

Using the 30 or 10 Percent Exceedance Forecasts. If an unexpected excess of water could cause problems (such as operating a flood control reservoir), users might plan on receiving 760 KAF (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 760 KAF.

Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 927 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 927 KAF.

Users could also choose a volume in between any of these values to reflect their desired risk level.

OWYHEE AND MALHEUR BASINS

Streamflow Forecasts - February 1, 2006

		<<====== Drier ====== Future Conditions ======= Wetter =====>>				
Forecast Point	Forecast Period	========== Chance Of Exceeding * ==========				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
MALHEUR near Drewsey	FEB-JUL	148	184	210	165	238	282	127
	APR-SEP	87	110	128	168	147	177	76
NF MALHEUR at Beulah	FEB-JUL	108	127	141	157	156	178	90
OWYHEE RESV INFLOW (2)	FEB-JUL	602	792	935	134	1090	1340	700
	APR-SEP	341	473	575	134	687	869	430

** 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.*

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Official Business

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http://www.or.nrcs.usda.gov/snow/watersupply/

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